



# Product Evaluation

DR703 | 1014

Engineering Services Program

*The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

*For more information, contact TDI Engineering Services Program at (800) 248-6032.*

**Evaluation ID:** DR-703

**Effective Date:** October 1, 2014

**Re-evaluation Date:** December 2016

**Product Name:** Wood Edge Fiberglass Glazed Inswing and Outswing Hinged Doors with Sidelites, Impact Resistant

**Manufacturer:** Bison  
1445 West Sam Houston Parkway North  
Houston, TX 77043  
(713) 467-6700

## General Description:

System	Description	Design Pressure Rating
1	Glazed Inswing Hinged Door with Sidelites	+55/-55 psf
2	Glazed Outswing Hinged Door with Sidelites	+55/-55 psf
3	Glazed Inswing Hinged Door with Sidelites	+43/-45 psf
4	Glazed Outswing Hinged Door with Sidelites	+43/-45 psf
5	Glazed Outswing Hinged Door with Surface Bolts and with Sidelites	+43/-45 psf

## Product Dimensions - Doors:

System	Overall Size	Active Panel Size	Passive Panel Size	Daylight Opening Size
1	148.5"x81.75"	35.75"x79.25"	36.375"x79.25"	21"x63"
2	148.5"x80.75"	35.75"x79.25"	36.375"x79.25"	21"x63"
3	148.5"x97.75"	35.75"x95.25"	36.375"x95.25"	21"x79"
4	148.5"x96.75"	35.75"x95.25"	36.375"x95.25"	21"x79"
5	148.5"x96.75"	35.75"x95.25"	36.375"x95.25"	21"x79"

**Product Dimensions - Sidelites:**

System	Sidelite Panel Size	Daylight Opening Size
1	35.75"x79.25"	21"x63"
2	35.75"x79.25"	21"x63"
3	35.75"x95.25"	21"x79"
4	35.75"x95.25"	21"x79"
5	35.75"x95.25"	21"x79"

**Hardware:**

- **Hinges:** Six required (three per door panel); secure to the door panel with four (4), No. 10 x 3/4" screws; secure to the doorjamb with two (2), No. 10 x 5/8" screws and two (2), No. 10 x 2-1/2" screws.
- **Kwikset Series 400 Lockset:** locate on the active door panel.
- **Kwikset Series 980 deadbolt:** locate on the active door panel.
- **Strike plate – Lockset:** one required; locate on the doorjamb; secure with two (2), No. 8 x 2-1/2" screws.
- **Strike plate – Deadbolt:** one required; locate on the doorjamb; secure with two (2), No. 8 x 2-1/2" screws.
- **8" Ives Model 453 Surface Bolts (System 5):** two required; locate at the top and bottom of the active lock stile; secure each to the door panel with four (4), No. 10 x 1-1/2" screws.

**Thresholds:**

- 1.25" high aluminum adjustable threshold (Systems 1, 3)
- 1" high aluminum bump threshold (Systems 2, 4, 5)

**Product Identification (Certification Agency Label on Door):**

System		
1-5	Manufacturer	Bison / Houston, TX
	Product Name	Impact Glazed Fiberglass Door Unit Inswing or Outswing; Config: X, XX, OX, XO, OXO, OXXO
	Test Standards	ASTM E 330; ASTM E 1886, ASTM E 1996, Missile Level D

**Impact Resistance:**

System	Impact Resistant	Requirement
1-5	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

**Acceptance of Smaller Assemblies:** TDI accepts door assemblies with dimensions equal to or smaller than those within the limitations specified in this report.

**Sidelites:** Only use sidelites with doors. Do not install sidelites individually.

**Installation:**

**Systems 1 and 2:** Fasten the door assembly to minimum Spruce-Pine-Fir dimension lumber wall framing. Secure the door assembly to the wall framing using minimum No. 10 x 2-1/2" long flat head screws as follows:

- **Head and Sill (Door and Sidelite):** located approximately 6" from each end; 3" and 6" on each side of the mullion and the astragal, and one screw placed at the centerline of each panel
- **Jambs:** Located approximately 6" from each corner and spaced approximately 14" on center
- **NOTE:** Use fasteners long enough to penetrate a minimum of 1-1/2" into the wood framing. If the frame sill secures to concrete rather than wood framing members, then substitute a 3/16" diameter concrete anchor for the No. 10 x 2-1/2" long screws noted above. Embed the concrete anchor a minimum of 1-1/4" into the concrete.

**Systems 3, 4, and 5:** Fasten the door assembly to minimum Spruce-Pine-Fir dimension lumber wall framing. Secure the door assembly to the wall framing using minimum No. 10 x 2-1/2" long flat head screws as follows:

- **Head and Sill (Door and Sidelite):** locate approximately 6" from each end; 3" and 6" on each side of the mullion and the astragal, and one screw placed at the centerline of each panel
- **Jambs:** Locate approximately 6" from each corner and spaced approximately 17" on center
- **NOTE:** Use fasteners long enough to penetrate a minimum of 1-1/2" into the wood framing. If the frame sill secures to concrete rather than wood framing members, then substitute a 3-16" diameter concrete anchor for the No. 10 x 2-1/2" long screws noted above. Embed the concrete anchor a minimum of 1-1/4" into the concrete.

**Note:** The manufacturer's installation instructions must be available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.